Title (en)

BYPASS VALVE FOR DOWNHOLE MOTOR

Title (de)

BEIPASS-VENTIL FÜR BOHRLOCHMOTOR

Title (fr)

SOUPAPE DE DERIVATION DESTINEE A UN MOTEUR FOND DE TROU

Publication

EP 1019611 A4 20010509 (EN)

Application

EP 98945839 A 19980902

Priority

- US 9818227 W 19980902
- US 92304497 A 19970903

Abstract (en)

[origin: US5873414A] A bypass valve, particularly useful for allowing a tubing string to fill or drain during tripping in and tripping out, is disclosed. The bypass valve can be used in conjunction with a downhole motor operated through a tubing string. The bypass valve features a movable tapered valve member which has a smaller taper than the valve seat to prevent dragging the sealing element across sharp edges as the valve closes. Ports are provided through the valve to conduct upstream pressure in the valve behind the sealing element so that upon contact of the sealing element on the valve member with the seat, a boost force is applied to help retain the seal.

IPC 1-7

E21B 21/10

IPC 8 full level

E21B 21/10 (2006.01); **E21B 34/06** (2006.01); **F16J 15/48** (2006.01)

CPC (source: EP US)

E21B 21/103 (2013.01 - EP US); **E21B 34/06** (2013.01 - EP US); **F16J 15/48** (2013.01 - EP US)

Citation (search report)

- [X] US 4258901 A 19810331 - ZINNAI SADAZI, et al
- [X] GB 2157374 A 19851023 - WAESCHLE MASCHF GMBH
- [A] US 4298077 A 19811103 - EMERY MAURICE M
- [A] US 4256314 A 19810317 - BERGLUND AKE, et al
- [A] US 5660396 A 19970826 - SCHOUTEN FRANK [NL]
- [A] US 4324407 A 19820413 - UPHAM NEIL R, et al
- [A] US 4362304 A 19821207 - HUENGER WALTER
- See references of WO 9911903A1

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

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